

We claim:

1. A method of operating a plurality of wireless networks, comprising:
transmitting first signals in a first network at a first carrier frequency;
transmitting second signals in a second network at a second carrier frequency,
the second carrier frequency being different from the first carrier frequency,
wherein the first carrier frequency is offset from a base carrier frequency by an
amount equal to n times an offset frequency,
wherein the second carrier frequency is offset from the base carrier frequency by
an amount equal to m times the offset frequency,
wherein n is an integer, m is an integer, and m does not equal n .
2. A method of operating a plurality of wireless networks, as recited in claim 1,
wherein n is 1 and m is -1
3. A method of operating a plurality of wireless networks, as recited in claim 1,
wherein the base carrier frequency is between 2 and 9 GHz.
4. A method of operating a plurality of wireless networks, as recited in claim 3,
wherein the base carrier frequency is between 3.5 and 4.5 GHz.
5. A method of operating a plurality of wireless networks, as recited in claim 4,
wherein the base carrier frequency is about 4.104 GHz.

6. A method of operating a plurality of wireless networks, as recited in claim 3, wherein the base carrier frequency is between 7.5 and 8.5 GHz.

7. A method of operating a plurality of wireless networks, as recited in claim 4, wherein the base carrier frequency is about 8.208 GHz.

8. A method of operating a plurality of wireless networks, as recited in claim 3, wherein the offset frequency is between 1 and 10 MHz.

9. A method of operating a plurality of wireless networks, as recited in claim 8, wherein the offset frequency is about 3 MHz.

10. A method of operating a plurality of wireless networks, as recited in claim 1, further comprising:

forming the first signals out of first pulses formed of p cycles of a first oscillating signal operating at a first oscillating frequency; and

forming the second signals out of second pulses formed of p cycles of a second oscillating signal operating at a second oscillating frequency,

wherein the first oscillating frequency is offset from a base oscillating frequency by an amount equal to $\frac{n}{p}$ times the offset frequency, and

wherein the second oscillating frequency is offset from a base oscillating frequency by an amount equal to $\frac{m}{p}$ times the offset frequency.

11. A method of operating a plurality of wireless networks, as recited in claim 1, wherein p is 3.

12. A method of operating a plurality of wireless networks, as recited in claim 1, wherein the plurality of wireless networks are ultrawide bandwidth networks.

13. A method of operating a plurality of wireless networks, comprising:
transmitting first through k^{th} signals in first through k^{th} networks at first through k^{th} carrier frequencies, respectively; and
offsetting the i^{th} carrier frequency from a base carrier frequency by an amount equal to n_i times an offset frequency,
wherein k is an integer greater than 1,
wherein i varies from 1 to k , and
wherein none of n_1 through n_i has the same integer value.

14. A method of operating a plurality of wireless networks, as recited in claim 13, wherein k is 4.

15. A method of operating a plurality of wireless networks, as recited in claim 14 wherein n_1 is -2, n_2 is -1, n_3 is 1, and n_4 is 2.

16. A method of operating a plurality of wireless networks, as recited in claim 13, wherein the base carrier frequency is between 2 and 9 GHz.

17. A method of operating a plurality of wireless networks, as recited in claim 16, wherein the base carrier frequency is between 3.5 and 4.5 GHz.

18. A method of operating a plurality of wireless networks, as recited in claim 17, wherein the base carrier frequency is about 4.104 GHz.

19. A method of operating a plurality of wireless networks, as recited in claim 16, wherein the base carrier frequency is between 7.5 and 8.5 GHz.

20. A method of operating a plurality of wireless networks, as recited in claim 19, wherein the base carrier frequency is about 8.208 GHz.

21. A method of operating a plurality of wireless networks, as recited in claim 16, wherein the offset frequency is between 1 and 10 MHz.

22. A method of operating a plurality of wireless networks, as recited in claim 21, wherein the offset frequency is about 3 MHz.

23. A method of operating a plurality of wireless networks, as recited in claim 13, wherein k is 3.

24. A method of operating a plurality of wireless networks, as recited in claim 13, wherein n_1 is -1 , n_2 is 0, and n_3 is 1.

25. A method of operating a plurality of wireless networks, as recited in claim 13, further comprising:

forming the i^{th} signals out of pulses formed of p cycles of an i^{th} oscillating signal operating at an i^{th} oscillating frequency,

wherein the i^{th} oscillating frequency is offset from a base oscillating frequency by an amount equal to $\frac{n_i}{p}$ times the offset frequency.

26. A method of operating a plurality of wireless networks, as recited in claim 13, wherein p is 3.

27. A method of operating a plurality of wireless networks, as recited in claim 13, wherein the plurality of wireless networks are ultrawide bandwidth networks.